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EXAMINER

ZHAO, DAQUAN

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2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/671,017	Applicant(s) KIM ET AL.	
	Examiner Daquan Zhao	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 and 34-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32, 34-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 10/19 arguments with respect to claims 31, 32, 34-40 have been fully considered but they are not persuasive.
3. On page 14 of the remark, Applicant argues the inventive method of claim 31 does not involve turning the player on and off as in Ono and resumes playback of the first title once playback of a bonus title associated with the first title is concluded.
4. The argument of the inventive method of claim 31 does not involve turning the player on and off as in Ono and resumes playback is not recited in claim 31, and the teaching of Ono about resuming playback after power off and on reads on the claimed limitation of claim 31 because the use can turn off the power when the playback of a title or bonus title is **concluded**.
5. On page 15 of the remark, Applicant argues the bonus title of the present claimed invention, which is associated with the first title recorded on the recording medium, is distinguished from the bonus information of Tanaka et al.
6. Claim 31 only requires a bonus title associated with the first title. Tanaka teach et al teach, in column 9, lines 47-64, and figure 16, that the bonus title that associated with the first title because the bonus title (or title group) affects the first title group (group #1 in figure 16).

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7. Applicant's amendment with respect to claims 1, 11 and 26 necessitated the new ground(s) of rejection presented in this office action and all ground(s) of rejection for claims 31, 32, 34-40 are maintained. Accordingly, THIS ACTION IS MADE FINAL. See MPEG § 706.07 (a).

### **Claim Status**

Claim 33 is canceled; claims 1, 11, 26 and 21 are amended; claims 41-43 are new.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-5, 26, 27, 28, 30 and 41-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamauchi et al (US 6,798,981 B1).

**Regarding claim 1**, Yamauchi et al teach a recording medium comprising:

- a first recording area for recording data streams of a title domain and menu domain, said title domain comprising a plurality of titles including a main title and a bonus title (e.g. figures 3- 4, column 9, lines 10-50, wherein VOB corresponds to the main title and "audio

A, audio B and audio C" corresponds to the bonus title, wherein the VOB#1, VOB#2, VOB#3 and VOB#4 corresponds to a different version of a movie title), and said menu domain comprising a root menu (e.g. figure 3 and figure 9, column 8, lines 40-45, column 11, lines 10-20, M101 corresponds to the menu and M102-104 correspond to root menu); and

- a second recording area for recording navigation information for control of reproduction of the data streams (e.g. figure 8, column 10, lines 41-67, Management Pack, which corresponds to the navigation information, contain PCI and DSI to control the reproduction of the data streams),
- wherein the navigation information in the second recording area comprises playback control information for designating a location in the title domain to be returned to when playback operation resumes (e.g. column 10, lines 55-67, column 24, line 62- column 25, line 17, the apparatus resumes movie A, which corresponds to the title domain, from the menu domain when user press the "MENU" key again).

**Claim 26** is rejected for the same reasons as discussed in claim 1 above.

**Regarding claim 2**, Yamauchi et al teach the playback operation is resumed from the menu domain to the title domain (e.g. column 10, lines 55-67, column 24, line

62- column 25, line 17, the apparatus resumes movie A, which corresponds to the title domain, from the menu domain when user press the "MENU" key again).

**Regarding claim 3**, Yamauchi et al teach the navigation information further comprises a resume command for resuming the playback operation to the title, and wherein the resume command is recorded and managed in a program chain command table(e.g. column 10, line 55- column11, line 20, the PCI of the navigation packet contains command to be executed using the menu buttons M101-M108, wherein the menu is the highlight information, which is the button control information, is controlled by the PGC information management table as taught in column 13, lines 50-64 and column 14, lines 18-25, wherein the PGC information table corresponds to the program chain command table).

**Regarding claim 4**, Yamauchi et al teach the navigation information further comprises command information about number of resume commands (e.g. figure 10, "total number of buttons" in the PCI of the navigation packet).

**Regarding claim 5**, Yamauchi et al teach the command information is recorded and managed in said program chain command table (e.g. figure 13, PGC information management table, column 14, lines 17-35, the button command information is in the PGC information management table).

**For claims 41 and 42**, Yamauchi et al teach the recorded data streams support various contents, including a game (e.g. figure 9, "game" inside M101).

**Regarding claim 27**, Yamauchi et al teach the playback control information comprises a title cell number (e.g. column 18, lines 46-50, title search pointer).

**Regarding claim 28**, Yamauchi et al teach the playback control information comprises a video title set number (e.g. column 13, lines 51-64, VOB#1-VOB#4).

**Regarding claim 30**, Yamauchi et al teach the playback control information comprises program chain playback control status information (column 15, lines 47-56, permission flag of the PGC tells what sub title is being played back).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 6-9, 11, 12, 13, 15, 16, 21, 22, 23, 24, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al (US 6,798,981 B1), as applied to claims 1-5, 26, 27, 28, 30 and 41-42 above and further in view of Ono (US 6,914,863 B2).

Regarding claim 11, Yamauchi et al teach in response to a playback operation returning from a menu domain to the title domain, the title domain comprising a plurality of titles including a main title and a bonus title, and the menu domain comprising a root menu; and seeking and playing a first position of the first title corresponding to the first

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playback control information (e.g. column 23, line 45- column 24, line 25, wherein movie A, movie B and a game corresponds to "the title domain" and "English Voice" corresponds to bonus title, M101 corresponds to menu domain and M102-106 corresponds to root menu; column 10, lines 55-67, column 24, line 62- column 25, line 17, teach playback operation returning from a menu domain to the title domain).

However, Yamauchi et al fail to teach searching for and confirming first playback control information recorded on the recording medium for designating a first title in a title domain having system parameters comprising identification information indicating that the first title is resumable. Ono teach searching for and confirming first playback control information recorded on the recording medium for designating a first title in a title domain having system parameters comprising identification information indicating that the first title is resumable (e.g. abstract, column 8, line 34- column 9, line 34, extracting the reproduction parameters, which include the resume position, corresponds to searching for and confirming first playback control information, and the value of the counter 6 indicates whether the title is resumable or not ). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Ono into the teaching of Yamauchi et al to enhance the navigation system that can add a wide variety of interactive feature to playback of AV content while assuring the compatibility to the current or legacy DVD-video standard.

**Regarding claim 12**, Yamauchi et al teach the first playback control information comprises a title cell number (e.g. column 13, line 50-65, VOB#1).



**Regarding claim 13**, Yamauchi et al teach a video title set number (e.g. column 13, line 50-65, VOB#1).

**Regarding claim 15**, Yamauchi et al teach the playback control information comprises program chain playback control status information (column 15, lines 47-56, permission flag of the PGC tells what sub title is being played back).

**Regarding claim 16**, Yamauchi et al teach the program chain playback control status information designates the first position of the first title (column 15, lines 47-56, PGC #1).

**Regarding claim 21**, Yamauchi et al teach the playback operation is returned from the menu domain to the title domain (e.g. column 10, lines 55-67, column 24, line 62- column 25, line 17, the apparatus resumes movie A, which corresponds to the title domain, from the menu domain when user press the "MENU" key again); Ono teach the identification information indicates if the first title is resumable (e.g. abstract, column 8, line 34- column 9, line 34, extracting the reproduction parameters, which include the resume position, corresponds to searching for and confirming first playback control information, and the value of the counter 6 indicates whether the title is resumable or not ).

**Regarding claim 22**, Yamauchi et al teach identification information is included in system parameters of each of the plurality of titles in the title domain (e.g. column 10, lines 55-67, returned address is the title address as taught in column 24, lines 60-67).

**Regarding claims 6 and 8**, Ono teaches the title comprises a plurality of system parameters (e.g. abstract, abstract, column 8, line 34- column 9, line 34, extracting the reproduction parameters).

**Regarding claims 7 and 9**, Ono teach the system parameters comprises , identification information indicating that the title is resumable (e.g. abstract, column 8, line 34- column 9, line 34, extracting the reproduction parameters, which include the resume position, corresponds to searching for and confirming first playback control information, and the value of the counter 6 indicates whether the title is resumable or not ).

**Regarding claim 23**, Yamauchi et al the first recording area is a video recording area (e.g. figure 3, VOB#1-VOB#N).

**Regarding claim 24**, Yamauchi et al the first recording area is a DVD-video recording area (e.g. figure 1)

**Regarding claim 25**, Yamauchi et al teach the second recording area is a file structure recording area (e.g. figure 3, Video Title Set management information).

12. Claims 17, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al (US 6,798,981 B1) and Ono (US 6,914,863 B2) as applied to claims 1-5, 26, 27, 28, 30, ~~and~~ 41-42, 6-9, 11, 12, 13, 15, 16, 21, 22, 23, 24, 25 above, and further in view of Kim et al (US 7,113,694 B2). <sup>and</sup>

See the teaching of Yamauchi et al and Ono above.

**Regarding claims 17, 18, 19 and 20,** Yamauchi et al and Ono fail to teach updating the first playback control information with a second playback control information. Kim et al teach updating the first playback control information with a second playback control information (e.g. abstract, and column 4, line 60- column 5, line 3, updating the address of the navigation data corresponding to updating the playback control information). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim et al into the teaching of Yamauchi et al and Ono to update the playback control information using the program chain command to correctly playback the video data and increase the system's reliability.

13. Claims 10 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al (US 6,798,981 B1) as applied to claims 1-5, 26, 27, 28, 30 and 41-42 above, and further in view of Kim et al (US 7,113,694 B2).

See the teaching of Yamauchi et al above.

**Regarding claims 10 and 29,** Yamauchi et al teach a title cell number (e.g. figure 3, VOB number #1-#N), a video title set number (e.g. figure Video Title Set #1-#N), and program chain playback control status information (e.g. column 15, lines 47-57, permission flag). Yamauchi et al fail to teach a navigation pack start address. Kim et al teach the navigation pack start address (e.g. column 4, lines 49-50 also see abstract). It would have been obvious for one ordinary skill in the art at the time the invention was

made to incorporate the teaching of Kim et al into the teaching of Yamauchi et al to increase the data processing speed.

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14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al (US 6,798,981 B1) and Ono (US 6,914,863 B2) as applied to claims 1-5, 26, 27, 28, 30, ~~and~~ 41-42, 6-9, 11, 12, 13, 15, 16, 21, 22, 23, 24, <sup>and</sup> 25 above, and further in view of Kim et al (US 7,113,694 B2).

See the teaching of Yamauchi et al and Ono above.

**Regarding claim 14,** Yamauchi et al teach a title cell number (e.g. figure 3, VOB number #1-#N), a video title set number (e.g. figure Video Title Set #1-#N), and program chain playback control status information (e.g. column 15, lines 47-57, permission flag). Yamauchi et al and Ono fail to teach a navigation pack start address. Kim et al teach the navigation pack start address (e.g. column 4, lines 49-50 also see abstract). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim et al into the teaching of Yamauchi et al and Ono to increase the data processing speed.

15. Claims 31, 32, 34, 35, 36, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono (US 4,914,863 B2) and further in view of Tanaka et al (US 6,782,192 B1).

**Regarding claims 31, 39 and 40,** Ono teaches A method of resuming playback of audio/video (A/V) data recorded on a recording medium, the method comprising:

determining resumable status of a first title recorded on the recording medium;  
resuming playback of the first title if the resumable status is equal to a first value (e.g. column 2, lines 1-11, and figure 12, step 12-6 start resume play, column 9, lines 15-19).  
determining a first playback location associated with the first title (e.g. column 9, lines 45-51, VOB in DVD or column 3, lines 30-49, store sector position). Ono fails to teach a bonus title.

Tanaka et al teach a bonus title (e.g. column 4, lines 7-8). It would have been obvious for one ordinary skill in the art at the time the invention was made to playback the bonus title taught by Tanaka et al in the system of Ono and determine the resumable status and playback the first title once the playback of a bonus title associated with the first title is concluded (e.g. Ono, abstract, and column 3, lines 1-29, user can turn the power off once the bonus title playback is concluded and then turn the power back on to resume playback) to enhance the system's reliability.

**Regarding claim 32**, Ono teaches resuming playback of a second title if the resumable status is equal to a second value (e.g. column 5, lines 44-67).

**Regarding claim 34**, Ono teaches the first playback location is associated with a location where the first title begins (e.g. user turn off the power at the first title begins).

**Regarding claim 35**, Ono teach the first playback location is associated with a location other than where the first title begins (e.g. user turn off the power at the location associated with a location other than where the first title begins).

**Regarding claim 36**, Ono teach the first playback location is associated with a location where a second title begins (e.g. user turn off the power at a second title begins).

16. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono (US 6,014,863 B2) and Tanaka et al (US 6,782,192 B1) as applied to claims 31, 32, 34, 35, 36, 39 and 40 above, and further in view of Kikuchi et al (US 6,532,334 B1).

**Regarding claim 37**, Ono and Tanaka et al fail to teach the program chain command. Kikuchi et al teach the program chain command (e.g. column 8, lines 40-46). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kikuchi et al into the teaching of Ono and Tanaka et al to provide the first playback location for the first title to increase the data processing speed.

**Regarding claim 38**, Kikuchi et al teach the mapping table associated with a program chain command (e.g. column 8, lines 40-64, PGC information table).

17. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono (US 6,014,863 B2) and Tanaka et al (US 6,782,192 B1) as applied to claims 31, 32, 34, 35, 36, 39 and 40 above, and further in view of Yamauchi et al (US 6,798,981 B1).

See the teaching of Ono and Tanaka et al above.

**Regarding claim 43**, Ono and Tanaka et al fail to specify a bonus video title.

Yamauchi et al teach a bonus video title (e.g. column 9, lines 26-41, and figure 9, teach three versions, which includes "no-cut version", "theater version" and "tv on-air version" of a movie title A, selecting "0" movie A is in M101 leads to the selection of the three versions of the movie title A, wherein the three versions of the movie title A are considered to be the bonus video title). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Yamauchi et al into the teaching of Ono and Tanaka et al to increase the number of options in the DVD for the benefit of the users.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEG § 706.07 (a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing data of this action. In the event a first reply is filed within TWO MONTHS of the mailing data of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period. Then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing data of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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